

PROCEEDINGS
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THE STATUS OF *SOREX MERRIAMI*, WITH DESCRIPTION OF AN ALLIED NEW SPECIES FROM UTAH.

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Some twenty-five years ago, Maj. Chas. E. Bendire collected a small shrew near Fort Custer, Montana. The specimen, preserved in alcohol, subsequently passed into the hands of Dr. G. E. Dobson, who cited it in 1890 as the type of his *Sorex merriami*. Owing to a chain of circumstances, suspicion then arose that Dr. Dobson had accidentally associated a skull of some Old World shrew with the alcoholic specimen from Montana, and the name *merriami*, though retained in most systematic works, has since been somewhat in abeyance. The case was stated by Dr. Merriam, in 1895, as follows:*

“The type and only known specimen of this remarkable shrew was presented to me by Maj. Charles E. Bendire, who collected it at the post garden, on the Little Big Horn River, about a mile and a half above Fort Custer, Mont., December 26, 1884. I sent it, with all my other shrews, to Dr. George E. Dobson, who was then engaged on a monographic revision of the Soricidæ. Unfortunately, owing to Dr. Dobson’s continued ill health, all that has ever been published of this monograph is a fasciculus of plates, showing the jaws and teeth of certain species, with a page of explanation facing each plate. (Monog. Insectivora, Part III, fasc. 1, May, 1890.) The present species is named and its peculiar dentition shown in Pl. XXIII, fig. 6, of this work. But the remarkable shape of the palate and peculiarities of the skull as a whole are not shown. The skull was removed from the alcoholic specimen by Dr. Dobson, and I have sometimes wondered whether by any possible accident it could have been transposed with that of some Asiatic species, it is so very

* North American Fauna, No. 10, pp. 88-89, Dec. 31, 1895.

unlike all known American shrews. When the specimen was returned the alcoholic bore my original label and number (1001), but the skull was numbered differently (1886; its proper number is 4861). Dr. Dobson afterwards wrote me that his number was an error, and that the skull belonged to my alcoholic No. 1001.''

Since this account no further light upon the unfortunate case was obtained until the summer of 1908, at which time, while engaged in field work in southern Utah for the Biological Survey, I had the good fortune to secure a shrew closely resembling the type of *S. merriami*. This appears to remove all doubt as to the validity of *merriami* as an American species and to make it practically certain that Dr. Dobson's type was as he supposed, both skin and skull from Fort Custer, Montana.

The Utah specimen agrees with *merriami* in its most pronounced characters, as dentition, shortness of palate, and thickness of rostrum, but differs sufficiently in size and depth of braincase to warrant separate recognition. Externally, it differs from all other American shrews in its pale color, particularly its creamy white underparts and white feet. These characters are more or less evident in the alcoholic type of *merriami*, and it is not improbable that in both species they are correlated with a relatively arid habitat. The Utah specimen was caught about two hundred yards from running water on a dry rocky Upper Sonoran slope, where the vegetation was scant and practically restricted to *Juniperus*, *Artemisia*, and *Atriplex*.

***Sorex leucogenys* sp. nov.**

Type from the mouth of the canyon of Beaver River, about 3 miles east of Beaver, Beaver Co., Utah. No. 157,952 U. S. National Museum, Biological Survey Collection. ♀ ad. Aug. 12, 1908. W. H. Osgood.

Characters.—Similar to *Sorex merriami*, but slightly larger, with a deeper, more elevated braincase. Tail decidedly shorter than head and body; color pale; skull with thick heavy rostrum and short broad palate; third unicuspid slightly larger than fourth.

Color.—Upperparts pale brownish drab; lower sides slightly paler than back, with distinct traces of clear eceru drab; underparts pure creamy white, the light terminal parts of the hairs relatively broad and almost entirely subduing the plumbeous undercolor; hairs of chin and sides of face from just below the eye to the end of the nose pure creamy white to roots; whiskers white, except a few upper ones blackish at the base; feet white; tail brownish drab above, white at extreme tip, and white below.

Skull and teeth.—Much as in *Sorex merriami*, but slightly larger; braincase decidedly deeper, not abruptly elevated, but sloping gradually upward in the plane from the anterior nares to the supraoccipital; palate broad and sub-triangular, with scarcely any deflection of its boundaries between the unicuspid and the molariform series; second unicuspid largest; third decidedly larger than fourth, its apex slightly inclined backward; fifth unicuspid unpigmented, small, wide and antero-posteriorly compressed; first four unicuspids relatively high and laterally compressed, lacking an inner lateral cusplet or pigmented ridge from apex to cingulum (in this respect, agreeing closely with *S. richardsoni*); inferior cusps of middle upper incisors small; first mandibular incisor with inferior cusps much reduced, scarcely more than slight undulations; third lower incisor rather high and narrow, with its posterior secondary cusp reduced.

Measurements.—Type: Total length, 107; tail vertebrae, 38; hind foot, 12.5. Skull: Greatest length, 17.2; greatest breadth of braincase, 8.4; interorbital breadth, 3.7; length of bony palate, 7; postpalatal length, 7.5; greatest width between outer sides of last upper molars, 5.2; length of maxillary toothrow, 7.4.